

# Annual Mammal Survey 2005

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## **Abstract**

Annual mammal surveys are used as an index to species distribution and abundance. For the 2005 Annual Mammal Survey, numbers of black bears, bobcats, coyotes, and gray wolves per respondent were above long-term averages. Numbers of American martens, badgers, fishers, jack rabbits, red fox, and river otters per respondent were below long-term averages. Long-term averages represent observations over the eighteen-year period of 1987-2004. Additionally, responses by field personnel in the 2005 Annual Mammal Survey decreased 6.9% from the 2004 level.

## **Methods**

Wildlife Survey materials were sent to regional land leaders with the instruction to distribute the survey forms to all field personnel in their region. The annual Mammal Survey was sent out with the Ten-Week Brood Survey. Field personnel were asked to record the number of ten mammal species, namely, American martens, badgers, black bears, coyotes, fishers, gray foxes, gray wolves, jack rabbits, river otters, and red foxes, observed by them while doing normal field operations during the past year. Field personnel were asked to report live sightings as well as road kills. All species have appeared on the annual mammal survey since 1987 except for gray wolves, which were added in 1997. Numbers per respondent were used because the number of observers changes from year to year. The number of respondents, however, underestimates the number of observers because field personnel did not fill out the survey if they sighted none of the mammals listed. Long-term averages are based on observations from the eighteen-year period of 1987-2004.

## **Results**

One hundred thirty five (135) surveys contained observations of mammals in 2005. Since 1987, respondents have averaged 186 surveys per year. The number of surveys returned in 2004 represents a 6.9% decrease from the 2004 response of 145 surveys.

### **American Marten**

One person observed one live American marten in 2005. American marten per respondent numbered 0.007 in 2005, which is lower than the long-term average of 0.011 (Figure 1).

### **Badger**

Forty-three field personnel observed 77 badgers in 2005. Thirty-nine (39) observations were live sightings and 38 observations were road kills. Badgers per respondent numbered 0.57 in 2005, which is slightly lower than the long-term average of 0.65 (Figure 2).

### **Black Bear**

Seventy-eight field personnel observed 381 black bears in 2005. Three hundred and fifty-one (351) observations were live sightings and 30 were road kills. Black bears per respondent numbered 2.82 in 2005, which is above the long-term average of 2.45 black bears per respondent (Figure 3).

### Bobcat

Twenty field personnel observed 29 bobcats in 2005. Twenty-six (26) observations were live sightings and 3 were road kills. Bobcats per respondent numbered 0.21 in 2005, which is well above the long-term average of 0.11 bobcats per respondent (Figure 4). Bobcat observations per respondent, have been above the long-term average since 2000.

### Coyote

Ninety-five personnel observed 370 coyotes in 2005. Two hundred and ninety-three (293) were live sightings and 77 were road kills. Coyotes per respondent numbered 2.85, which is above the long-term average of 2.27 coyotes per respondent (Figure 5).

### Fisher

Forty-eight field personnel observed 116 fishers in 2005. One hundred and three (103) were live sightings and 13 were road kills. Fishers per respondent numbered 0.86 in 2005, which is slightly below the long-term average of 0.89 fishers per respondent (Figure 6).

### Gray Fox

Thirty-three field personnel observed 49 gray foxes in 2005. Thirty-five (35) were live sightings and 14 were road kills. Gray fox per respondent numbered 0.34 in 2005, which is below the long-term average of 0.43 gray fox per respondent (Figure 7).

### Gray Wolf

Thirty field personnel observed 70 gray wolves in 2005. Sixty-three (63) were live sightings and 7 were road kill. Gray wolves observed per respondent numbered 0.52 in 2005, which is above the long-term average of 0.42 (Figure 8).

### Jack Rabbit

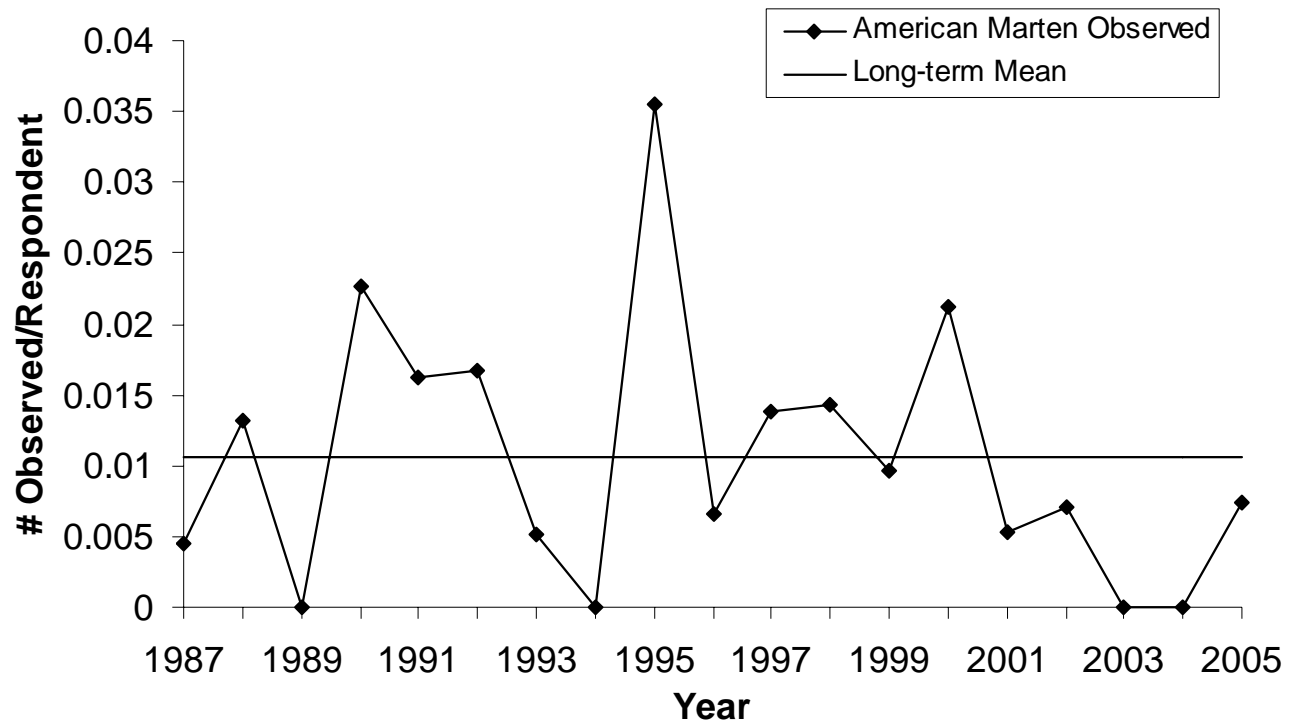
No jack rabbit sightings were observed in 2005. The long term average is 0.04 per respondent (Figure 9).

### Red Fox

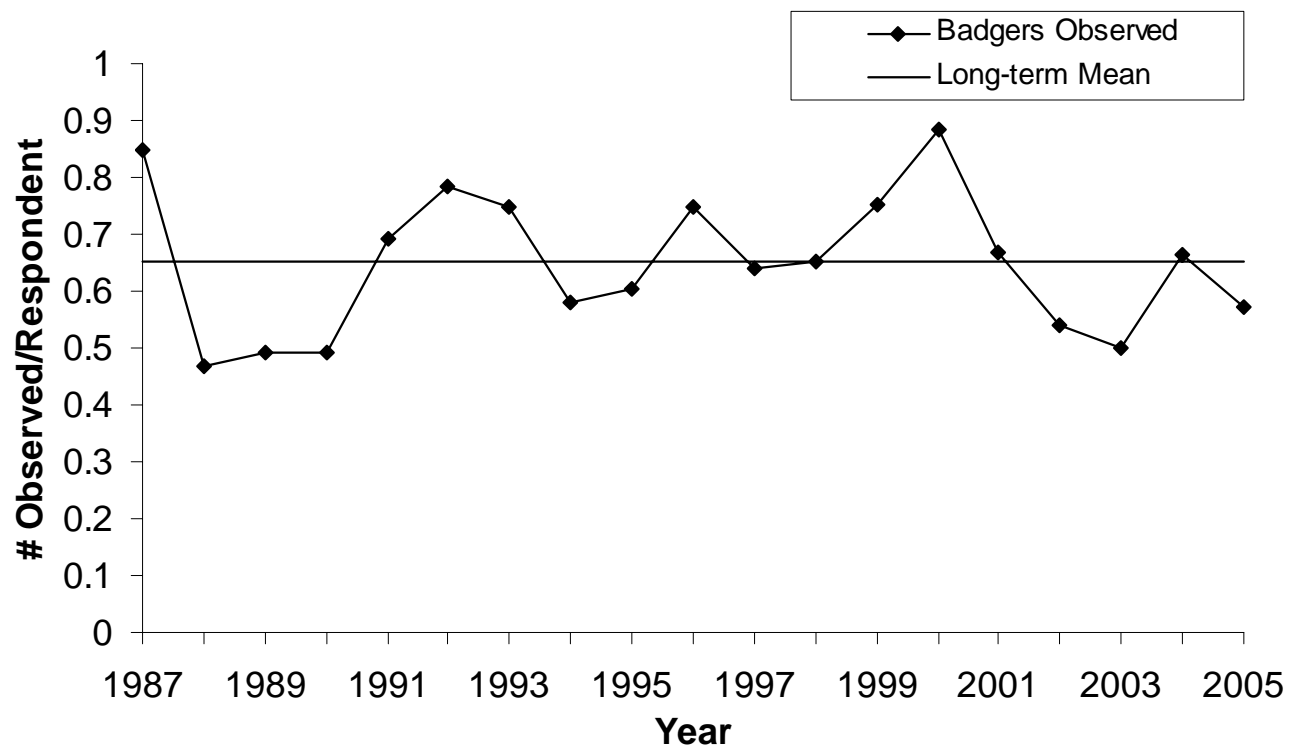
One hundred and three field personnel observed 392 red foxes in 2005. Two hundred and ninety-two (292) were live sightings and 100 were road kills. Red fox observed per respondent was 2.90 in 2005, which is below the long-term average of 4.59 red fox per respondent (Figure 10).

### River Otter

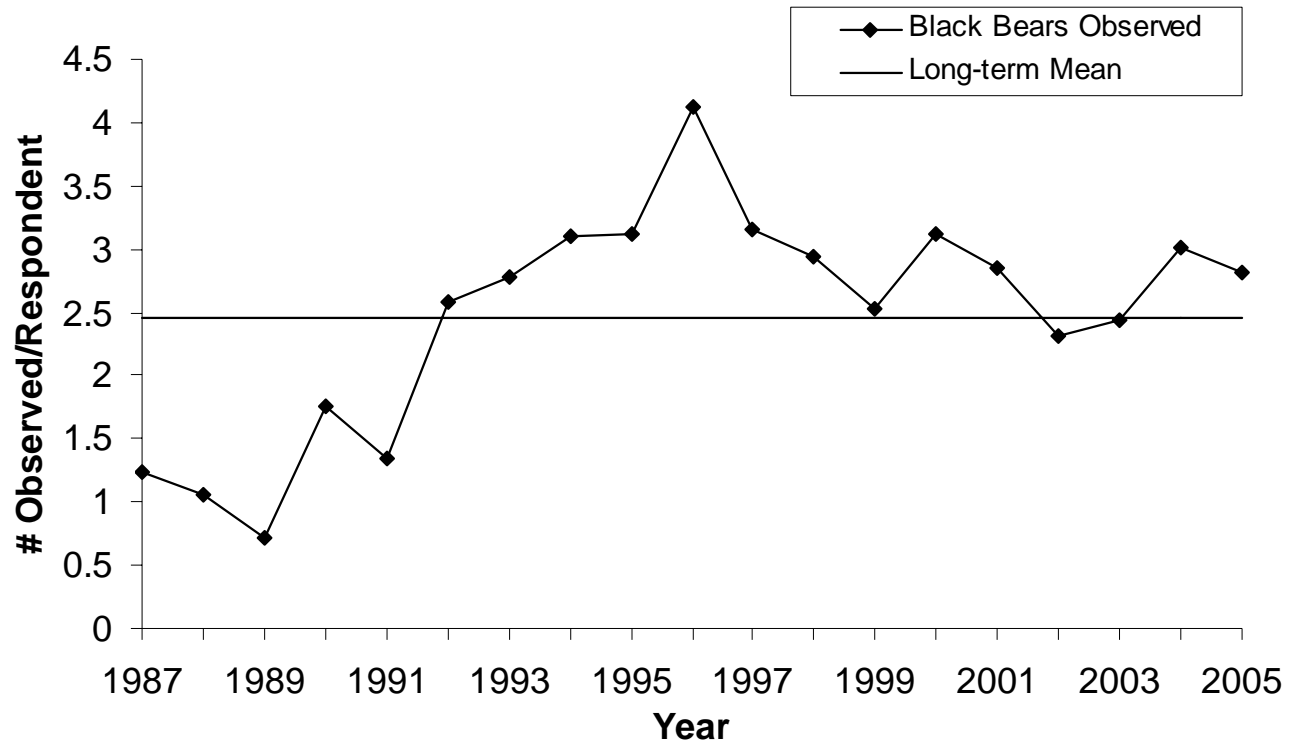
Fifty-one field personnel observed 200 river otters in 2005. One hundred and ninety-one (191) were live sightings and 9 were road kills. River otters observed per respondent in 2005 was 1.48, which is below the long-term average of 2.21 otters per respondent (Figure 11).



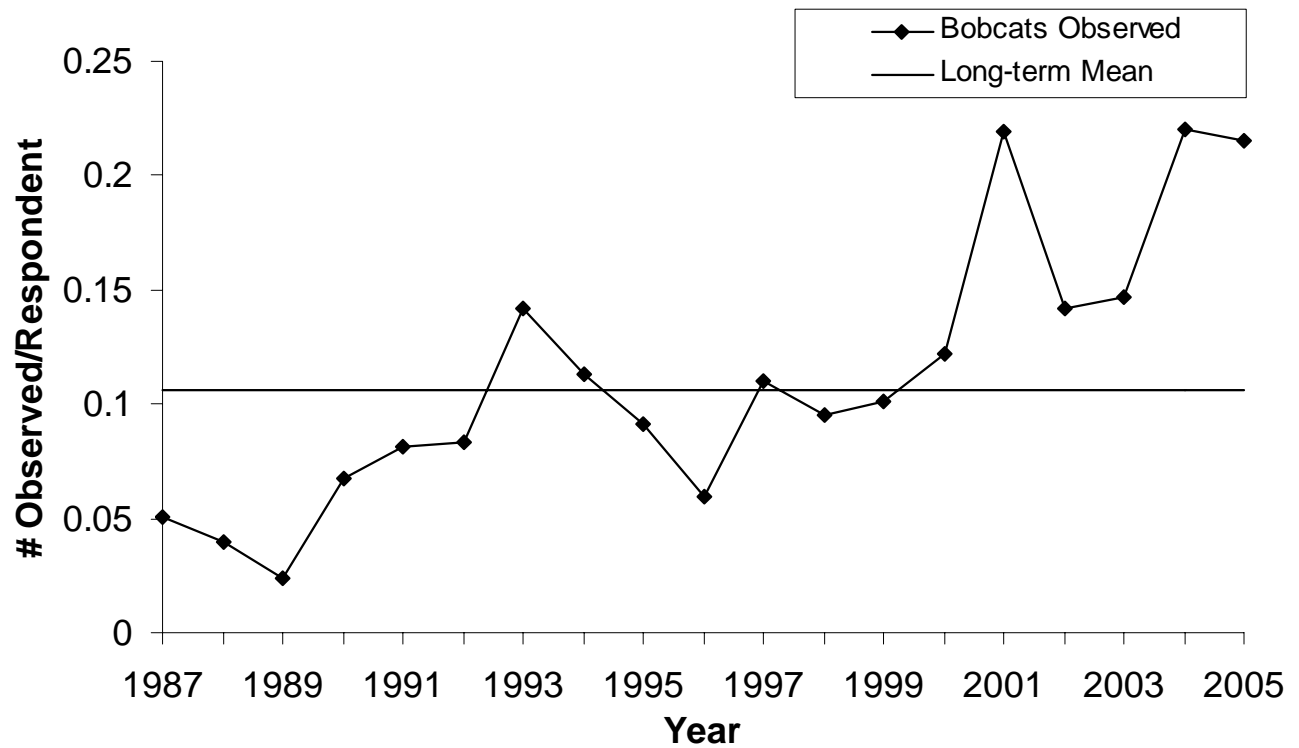
**Figure 1.** Number of American martens seen per respondent 1987-2005.



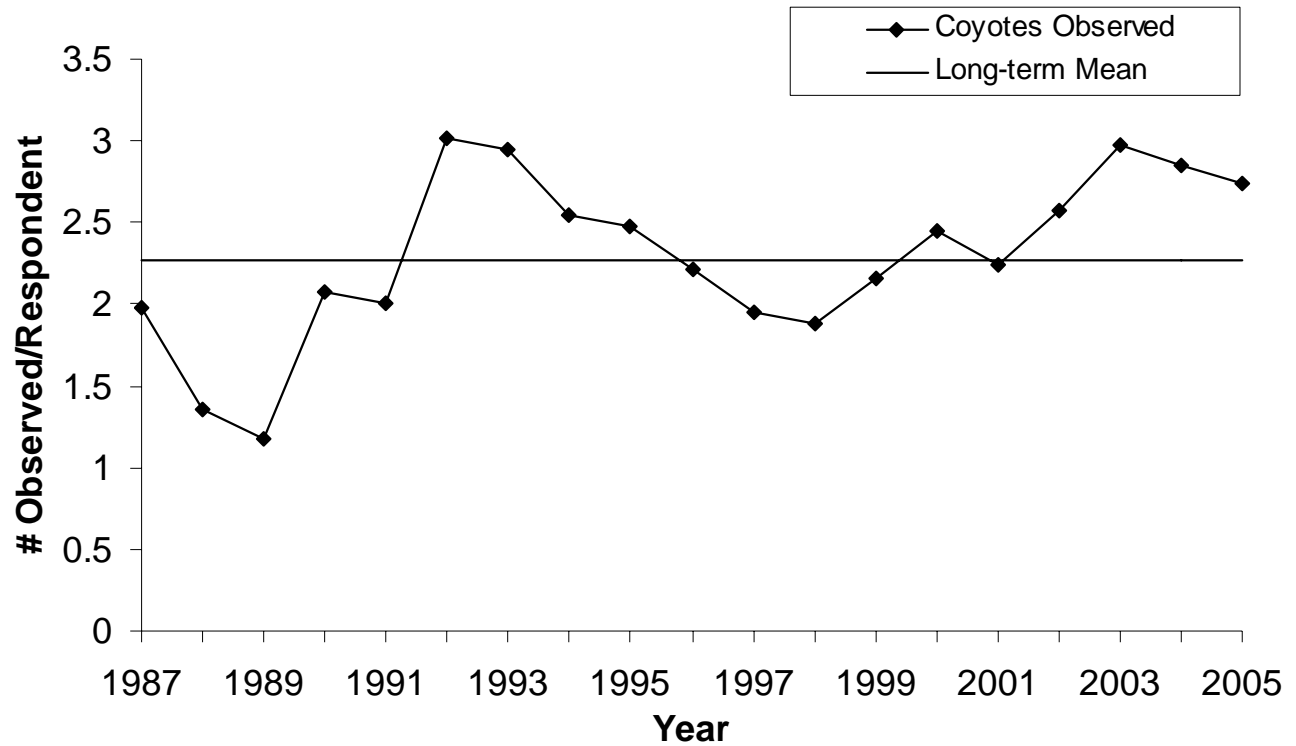
**Figure 2.** Number of badgers seen per respondent 1987-2005.



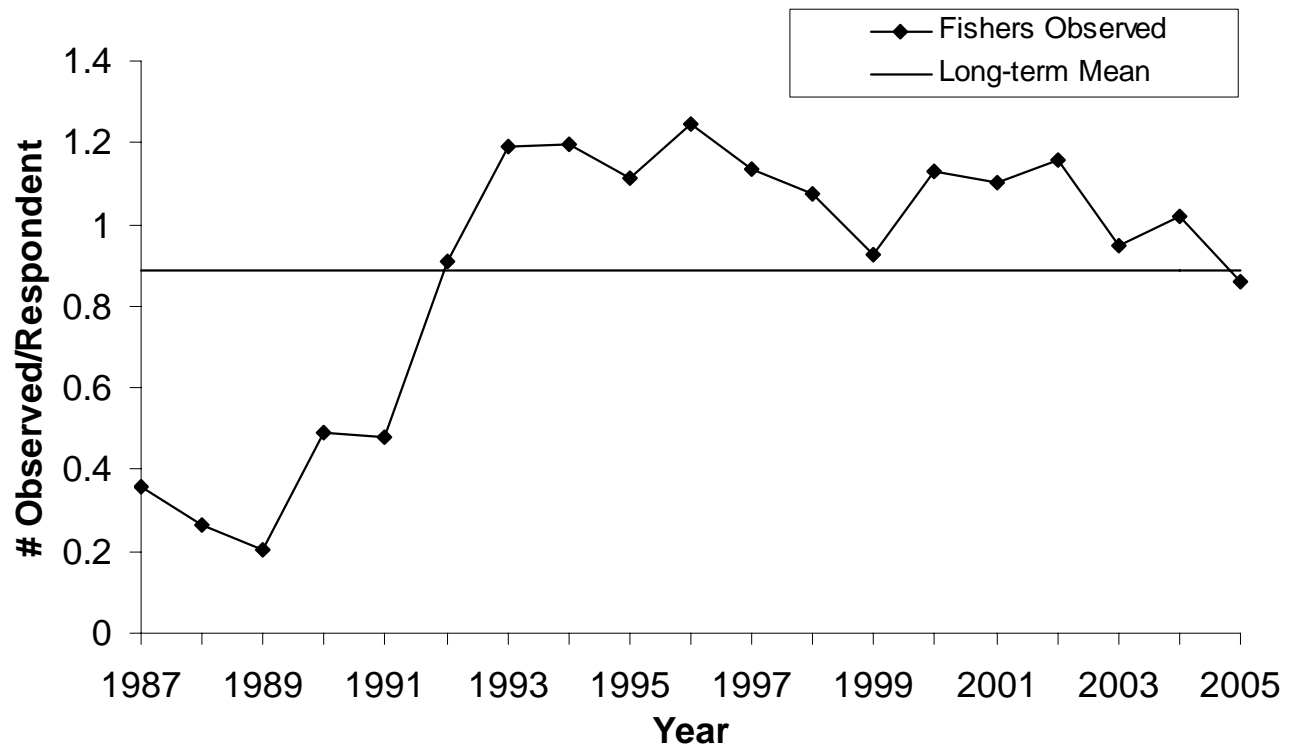
**Figure 3.** Number of black bears seen per respondent 1987-2005.



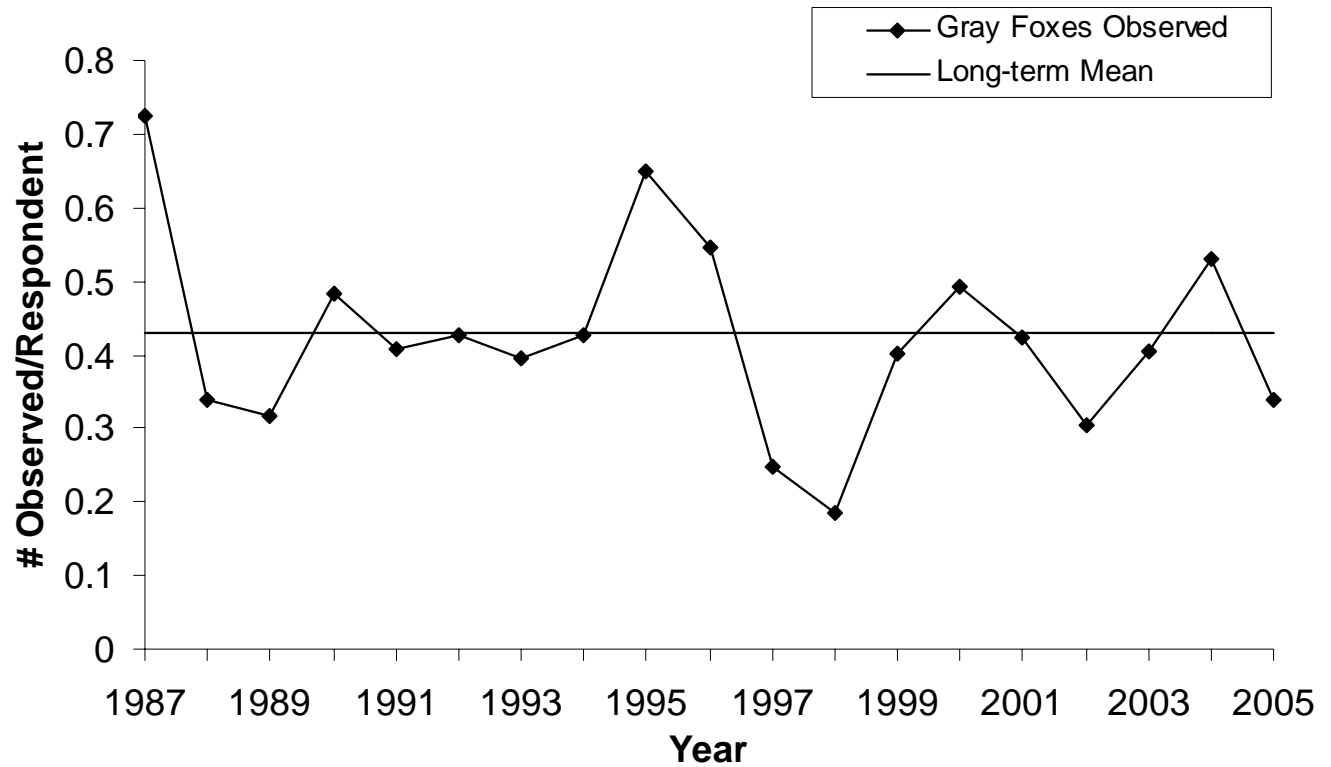
**Figure 4.** Number of bobcats seen per respondent 1987-2005.



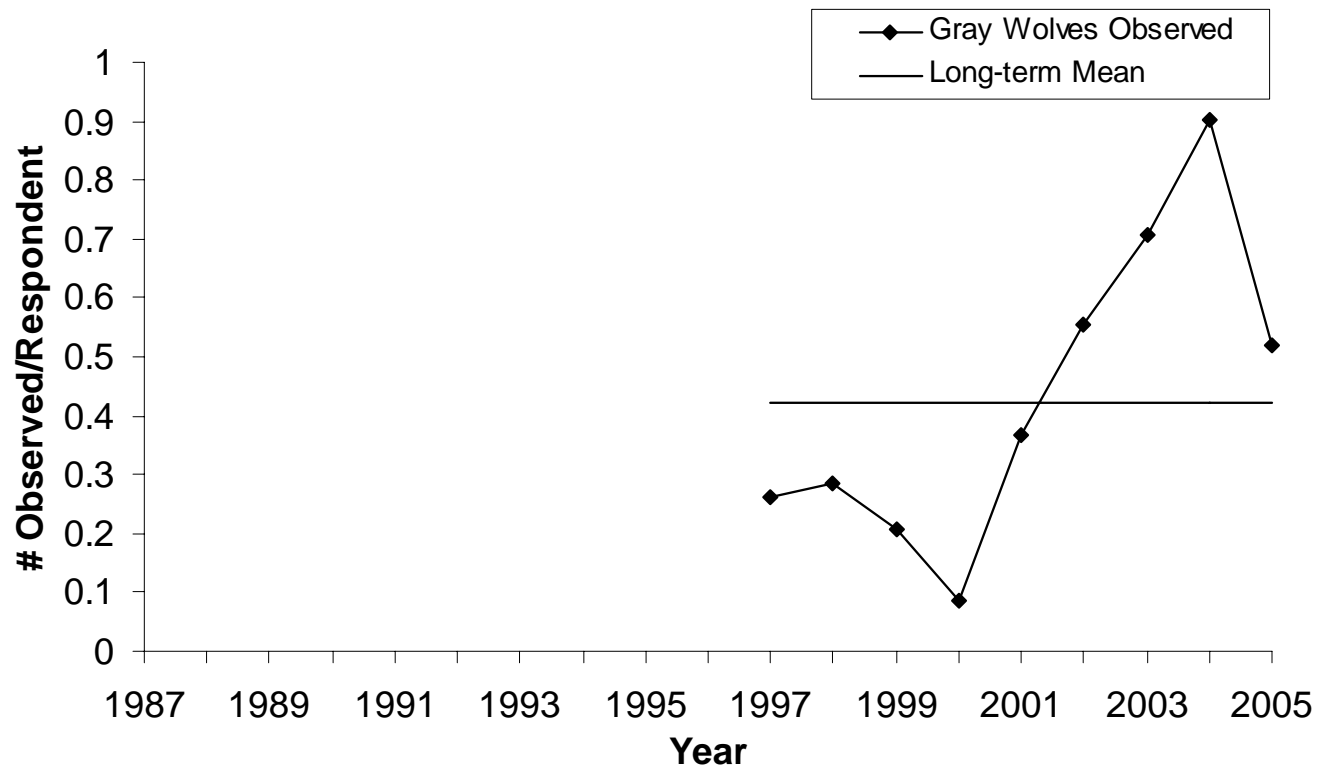
**Figure 5.** Number of coyotes seen per respondent 1987-2005.



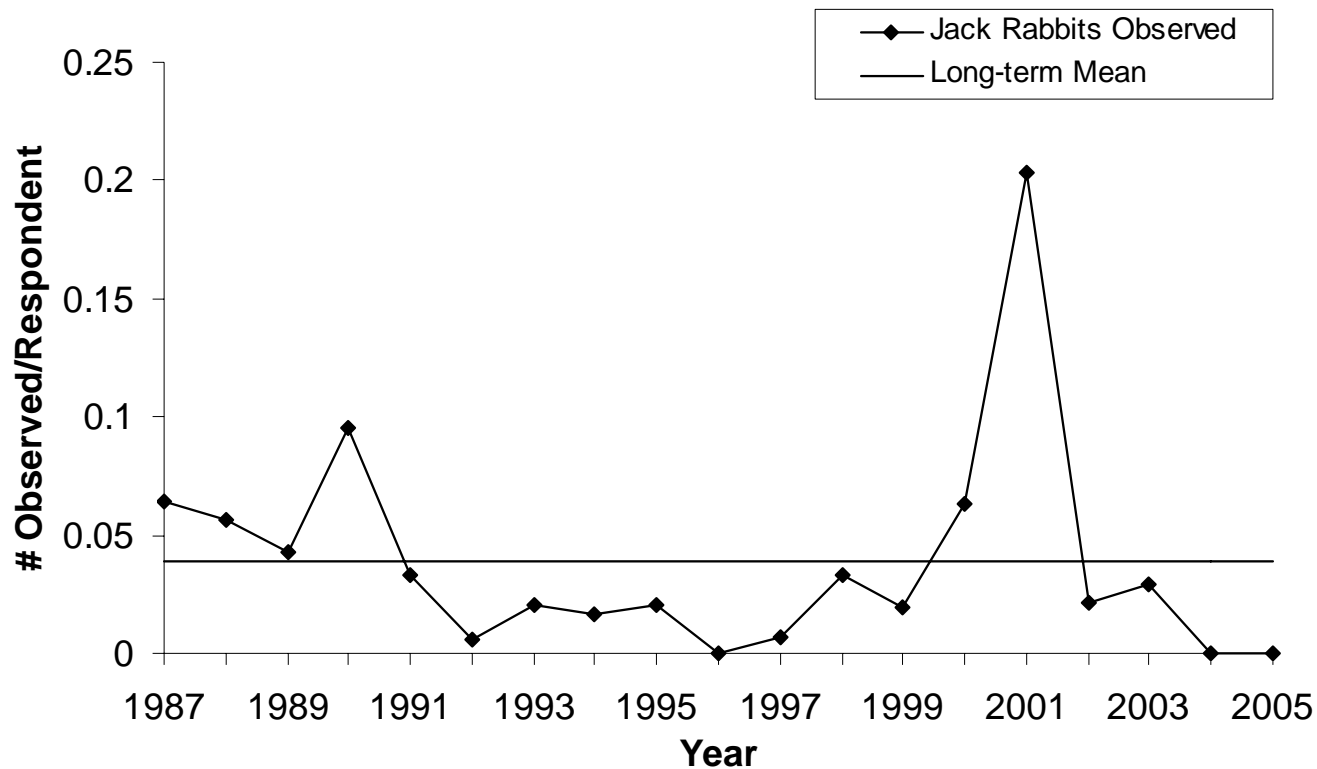
**Figure 6.** Number of fishers seen per respondent 1987-2005.



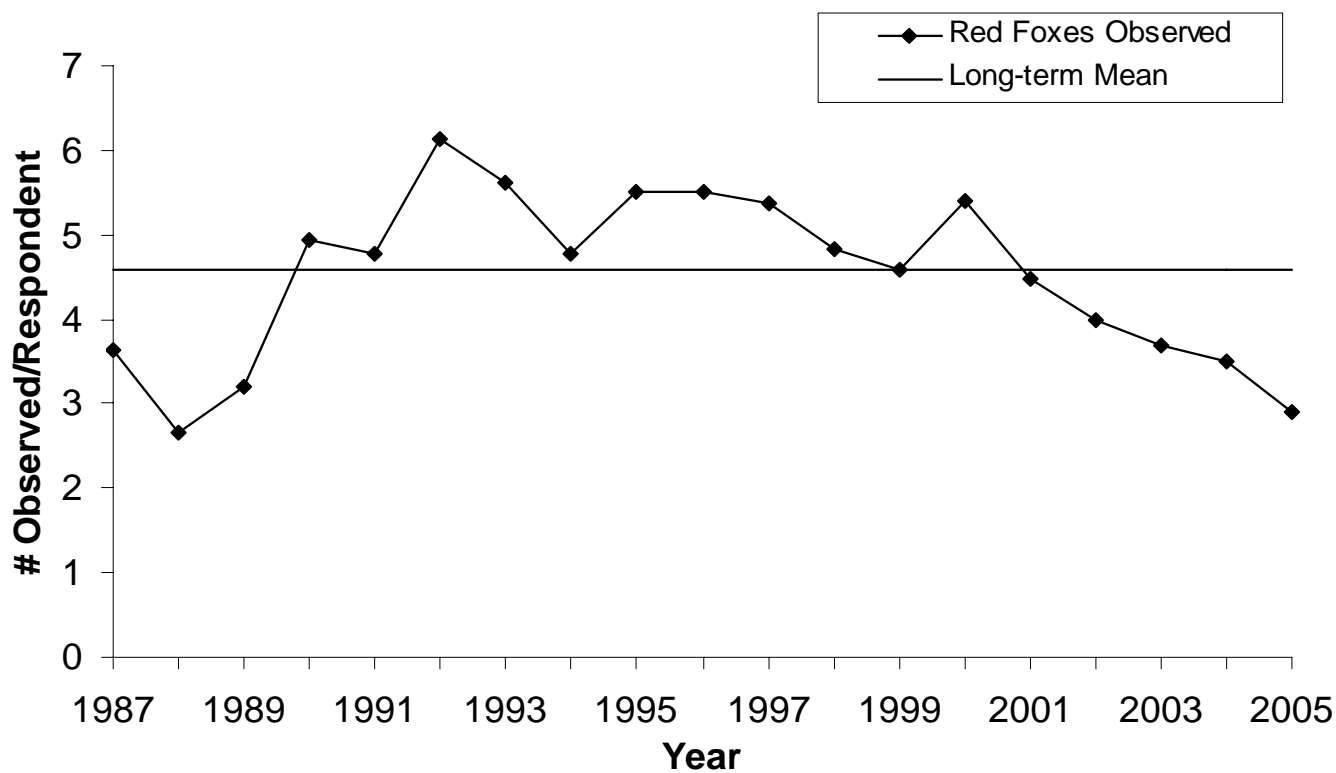
**Figure 7.** Number of gray foxes seen per respondent 1987-2005.



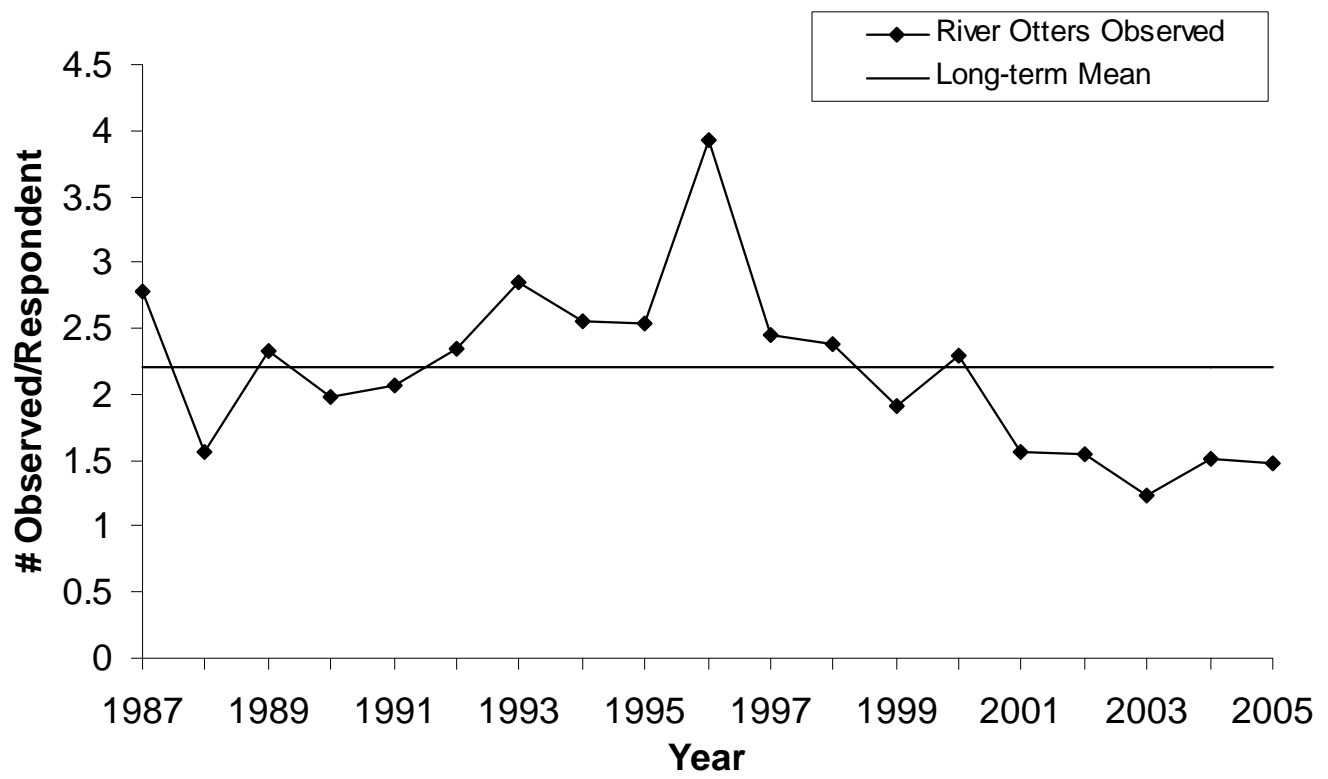
**Figure 8.** Number of gray wolves seen per respondent, 1997-2005.



**Figure 9.** Number of jack rabbits seen per respondent 1987-2005.



**Figure 10.** Number of red foxes seen per respondent 1987-2005.



**Figure 11.** *Number of river otters seen per respondent 1987-2005.*